

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of the claims in this application:

Listing of the Claims:

Claims 1–117. (Canceled).

118. (New) A method of diagnosing a disease characterized by expression or abnormal expression of a tumor-associated antigen comprising detection of the tumor-associated antigen or a portion thereof in a biological sample isolated from a patient, wherein the tumor-associated antigen is selected from the group consisting of:

(i) a polypeptide of any one of SEQ ID NOs: 22-24 and 58-61 or a portion thereof;

(ii) a polypeptide encoded by a nucleic acid of any one of SEQ ID NO: 19-21 and 54-57 or a portion thereof; and

(iii) a polypeptide encoded by a nucleic acid that hybridizes to a nucleic acid of any one of SEQ ID NOs: 19-21 and 54-57 or a portion thereof,

wherein detection of the tumor-associated antigen in the biological sample in an amount greater than an amount of the tumor-associated antigen in a normal biological sample indicates the disease.

119. (New) The method as claimed in claim 118, in which the detection comprises

(i) contacting the biological sample with an agent which binds specifically to the tumor-associated antigen or the portion thereof; and

(ii) detecting a complex formed between the agent and the tumor-associated antigen or the portion thereof.

120. (New) The method as claimed in claim 119, wherein the agent is an antibody.

121. (New) The method as claimed in claim 119, wherein the agent is labeled with a detectable marker.

122. (New) The method as claimed in claim 121, wherein the detectable marker is a radioactive marker or an enzymatic marker.

123. (New) The method as claimed in claim 118, wherein the biological sample comprises body fluid or body tissue.

124. (New) The method as claimed in claim 118, in which the disease is characterized by expression or abnormal expression of two or more different tumor-associated antigens and in which detection comprises detection of two or more different tumor-associated antigens or portions thereof.

125. (New) The method as claimed in claim 118, in which the tumor-associated antigen or portion thereof to be detected is in a complex with an MHC molecule.

126. (New) A method of diagnosing a disease characterized by expression or abnormal expression of a tumor-associated antigen comprising detection of a nucleic acid encoding the tumor-associated antigen or a portion thereof in a biological sample isolated from a patient, wherein the nucleic acid encoding the tumor-associated antigen is selected from the group consisting of:

(i) a nucleic acid of any one of SEQ ID NOs: 19-21 and 54-57 or a portion thereof;

(ii) a nucleic acid encoding a polypeptide of any one of SEQ ID NOs: 22-24 and 58-61 or a portion thereof;

(iii) a nucleic acid that hybridizes to a nucleic acid of any one of SEQ ID NOs: 19-21 and 54-57 or a portion thereof,

wherein detection of the nucleic acid encoding the tumor-associated antigen in the biological sample in an amount greater than an amount of the nucleic acid encoding the tumor-associated antigen in a normal biological sample indicates the disease.

127. (New) The method as claimed in claim 126, wherein the nucleic acid or portion thereof is detected by selectively amplifying said nucleic acid or portion thereof.

128. (New) The method as claimed in claim 126, in which the detection comprises

(i) contacting the biological sample with an agent which binds specifically to the nucleic acid encoding the tumor-associated antigen or the portion thereof; and

(ii) detecting a complex formed between the agent and the nucleic acid encoding the tumor-associated antigen or the portion thereof.

129. (New) The method as claimed in claim 128, wherein the nucleic acid or portion thereof is detected using a polynucleotide probe which hybridizes specifically to said nucleic acid or portion thereof.

130. (New) The method as claimed in claim 129, wherein the polynucleotide probe comprises a sequence of 6-50 contiguous nucleotides of a complement of the nucleic acid encoding the tumor-associated antigen.

131. (New) The method as claimed in claim 128, wherein the agent is labeled with a detectable marker.

132. (New) The method as claimed in claim 131, wherein the detectable marker is a radioactive marker or an enzymatic marker.

133. (New) The method as claimed in claim 126, wherein the biological sample comprises body fluid or body tissue.

134. (New) The method as claimed in claim 126, in which the disease is characterized by expression or abnormal expression of two or more different tumor-associated antigens and in which detection comprises detection of two or more different nucleic acids encoding the tumor-associated antigens or portions thereof.